

other genera the tentacles are ciliated, and also, in some species, other parts of the body. Mr. Clark was not more happy in his conjecture that *Homalogyra Rota* was the fry of *Cæcum Trachea*, the natural history of which this accomplished malacologist had so successfully investigated. I am not aware, indeed, that these shells or their animals have any character in common; besides which, it may be observed that the operculum of *Homalogyra* is flat and paucispiral, with an excentric nucleus, while that of *Cæcum* is more or less conical and multispiral, with a central nucleus, as in *Vermetus*. (Since this paper was read, I have received from the Marquis James Doria specimens of the young of *C. Trachea*, which he had dredged at Spezzia. The terminal part or spire is very different from that of *H. Rota*.)

The sexes in *Stilifer* appear to be separate, as may be seen from my description of the animal of *S. Turtoni*.

The shell of this species has been often described; but I will briefly allude to some of its characters, which have not been satisfactorily stated. The spire, for the first three whorls, is cylindrical and narrow; it then enlarges suddenly and disproportionately, and consists of three or four more whorls, which are rounded and extremely ventricose or swollen. The apex or nucleus of the spire is not reversed, although often set obliquely; it projects like the stump of a flagstaff which had been stuck in a slanting position on a steep mound. The columellar lip, in adult and perfect specimens, is slightly reflected. The lower part of the mouth is semicircular; it is not effuse or spread outwards, as in *Eulima* or *Aclis*.

XXXVII.—*Descriptions of Genera and Species of Hispidæ.*

By J. S. BALY.

[Continued from p. 271.]

Genus ALURNUS, Fabr.

Alurnus Batesii, n. sp.

A. oblongus, niger, nitidus; thorace rubro; elytris fulvo-flavis, maculis magnis tribus, triangulariter dispositis, punctoque humerali nigris.

Long. 11 lin.

Hab. Ega, Upper Amazons. Unique in the collection of Mr. Bates.

Oblong, shining black; thorax red; elytra bright fulvous yellow, three large patches on their surface, together with a small spot on each humeral callus, black. Head irregularly

punctured, vertex subrugose, portion of face below the insertion of the antennæ piceous; antennæ scarcely more than half the length of the body, their third joint elongate. Thorax one-fourth broader than long; sides subparallel, slightly rounded, sinuate near the base; posterior angles slightly produced, subacute, outer edge of rounded portion subsinuate; just behind the anterior angle is a deep notch, the angle itself being produced into a short obtuse tooth; above subcylindrical, irregularly excavated at the sides, surface covered with coarse punctures, which are irregularly confluent and subvariolose on either side; a narrow patch on the basal margin, in front of the scutellum, black. Scutellum semiovalate, its apex emarginate; surface smooth and shining, impressed with a few scattered punctures; towards the apex is a broad, shallow, longitudinal impression. Elytra oblong-ovate, sides slightly rounded, subsinuate below the shoulders; apex acutely rounded, conjointly concave-emarginate at the suture, sutural angles acute; above convex, surface deeply but not quite so coarsely punctured as the thorax; behind the middle, on the inner disk, are several indistinct longitudinal ridges; the three large black patches are placed in a triangle on the surface, and arranged as follows:—the first, common, ovalate, slightly emarginate at its upper edge, is situated immediately below the scutellum; the two others, larger and irregular in shape, are placed one on the disk of each elytron, scarcely below its middle; on the humeral callus is also a small round spot.

GENUS UROPLATA.

Many of the species to be described by me in this and the following papers are placed only provisionally in the present genus. *Uroplata*, as commonly understood, contains a vast number of apparently incongruous forms. I have been hitherto quite baffled in my efforts to break up these forms into smaller groups. Characters apparently most striking, and which, in other families, afford sure generic differences, here break down utterly, leaving the student more and more perplexed after each attempt to unravel and arrange this difficult group. I trust, however, that, by repeated efforts and continued study, I shall even yet succeed in my endeavours to divide the species into smaller but more natural genera.

Uroplata militaris, n. sp.

U. subcuneiformis, subdepressa, fulva; antennis nigris, thoracis margine laterali et vitta centrali, elytrorumque linea marginali prope apicem interrupta, fascia subapicali inter angulos posticos extensa, maculisque nonnullis obscure viridi-æneis: elytris apice ob-

tuse truncatis, angulo postico in spinam validam latam, dorso incrassatam, apice acutam, retrorsum paullo curvatam, lateraliter extensis; utroque quadricostato, costa tertia minus distincta, medio interrupta, apice abbreviata.

Long. $3\frac{1}{2}$ lin.

Hab. Ega, Upper Amazons.

Head smooth, finely granulose, moderately produced between the eyes; antennæ black, six basal joints smooth, nitidous, free from longitudinal grooves, moderately robust, subincrassate, basal joint slightly thickened, scarcely shorter than the second, third equal to the second, fourth and fifth each rather shorter, equal, sixth distinctly shorter than the fifth, seventh as long as the two preceding united, somewhat thickened, and, together with the four apical joints, forming an opaque elongated club, its apex acute, and the sutural lines between the last four joints obsolete. Thorax twice as broad as long, much narrowed in front; sides narrowly margined, obsoletely crenulate, rounded, sinuate near the apex; anterior angles slightly produced into a subacute tooth; above subcylindrical, slightly depressed transversely near the base, basal lobe with a deep transverse groove; centre of disk faintly impressed with a narrow longitudinal grooved line; surface closely covered with large rounded punctures; fulvous, the extreme lateral border and an interrupted longitudinal line down the middle of the disk dark metallic green. Scutellum shining fulvous, the apical half of its surface horizontal, concave, its apex obtusely rounded. Elytra broader than the thorax, slightly increasing in width towards the posterior angles, the latter produced almost directly outwards into a broadly dilated acute spine, the apex of which is curved slightly backwards, its upper surface longitudinally elevated; sides narrowly margined, finely and somewhat distantly serrated; apical margin narrow, obtusely truncate, its edge serrate; above subdepressed, convex on the sides and apex; shoulders slightly prominent, but not raised vertically, their apex subacute; each elytron with four elevated costæ, the two outer ones less distinct than the others, the second from the lateral border being interrupted in the middle of its course; suture also raised; interstices deeply bigemellate-punctate. Beneath bright fulvous; anterior pair of thighs bidentate beneath, the hinder tooth long, acute; four hinder thighs also armed with a long tooth, the intermediate pair with a minute tubercle in front; tibiæ curved, the four anterior armed just within the apex with a short tooth.

Collection of Mr. Bates and my own.

Uroplata puella, n. sp.

U. elongata, subdepressa, obscure fulva; thoracis vittis tribus elytrorumque vittulis viridi-æneis: elytris serratis, utroque trico-stato, angulo postico in laminam obtusam viridi-æneam modice lateraliter productis, apice obtuse truncatis; pedibus flavis; scutello nigro.

Long. 2 lin.

Hab. Brazil.

Head slightly produced in an obtuse angle between the eyes, vertex subopake, indistinctly grooved longitudinally; antennæ very robust, subincrassate, their basal joints short, nearly equal, the first being scarcely more swollen than the others; the three following from the third gradually decreasing in length, transverse; seventh nearly equal to the two preceding united, swollen, and forming with the four terminal joints a distinct club, the sutural lines between the last four obsolete. Thorax as broad at the base as long, sides narrowed from just above the extreme base to the apex, armed at their middle with two or more short teeth, anterior angles armed with an obtuse tooth; above subcylindrical, depressed and transversely excavated on the hinder disk, coarsely variolose-punctate; basal lobe oblique, transversely impressed. Scutellum quadrate. Elytra broader than the thorax, parallel in front, slightly dilated towards the hinder angle, surface of the latter irregularly thickened, sides and apical borders narrowly dilated, serrate; interspaces between the costæ deeply bigemellate-punctate.

This pretty little insect is not uncommon in collections.

Uroplata submarginalis, n. sp.

U. late cuneiformis, depressa, flavo-fulva, subnitida; elytris rufo tinetis; antennis rufo-fuscis, extrorsum pallidioribus; femoribus intermediis dimidio apicali nigro-purpureis: elytris apice oblique truncatis, tenuiter serratis, angulo postico in laminam compressam, trigonam, apice acutam, postice distincte serratam, lateraliter sat prominulam productis; utroque trico-stato, interspatiis fortiter bifariam punctatis, interspatio tertio apicem versus confuse trifariam punctato; marginibus basali et apicali, angulo postico vitæque curvata submarginali ab humero ad angulum posticum extensa purpureis aut rufo-purpureis.

Long. 2½ lin.

Hab. Ega, Upper Amazons.

Head very slightly produced between the eyes, vertex smooth; antennæ nearly one-third of the length of the body, moderately robust, subincrassate, joints cylindrical, two basal nearly equal, slightly thickened, third elongate, fourth nearly one-half shorter than the third; fifth and sixth still shorter, each decreasing in

length; seventh about equal to the fourth, incrassate, and, conjointly with the four terminal joints, forming a slender fusiform club; sutural lines between the last four obsolete. Thorax one-half broader than long, sides rounded and narrowed towards the apex, nearly straight and parallel at the base, above transversely convex, flattened and transversely depressed on the hinder disk, coarsely punctured, the punctures subrugose on the sides, more distant on the disk; basal lobe depressed. Scutellum oblique at the base, its apical half horizontal, its apex obtuse. Elytra much broader than the thorax, the shoulders obliquely rounded, lateral border narrow, serrate, interspace between the second and third costæ broad, impressed with three or more somewhat confused rows of punctures; on the hinder half of its surface is seen an indistinct ridge, which unites with the third costa just before its apex.

Collection of Mr. H. W. Bates and my own.

Uroplata pretiosa, n. sp.

U. subeuneiformis, subdepressa, supra flava; antennis, thoracis vitis tribus elytrisque nigris, his plaga humerali, fascia lata pone medium, margine dilatato lineaque marginali mox infra basin fere ad apicem exteriorem flavis; subtus fulva, pleuris, abdominis margine pedibusque nigris: elytris apice obtusis, angulo postico in spinam compressam acutam, lateraliter modice productis; utroque quadricostato, costa tertia medio interrupta.

Long. 3 lin.

Hab. Upper Amazons.

Head moderately produced between the eyes; vertex granulose, fulvous yellow, antennæ and a spot on the vertex black; antennæ moderately robust, slightly thickened towards their apex; all the joints distinct, two basal joints equal, cylindrical, the first thickened, third elongate, fourth and fifth each scarcely longer than the second, equal, sixth distinctly shorter than the fifth, seventh equal to fifth, three following joints each rather shorter than the seventh, also equal, the apical joint rather longer, acute. Thorax one-third broader at its base than long, sides rounded, nearly straight behind, narrowed and sinuate in front, anterior angles armed with a short obtuse tooth; above subcylindrical, transversely excavated near the base, coarsely punctured; fulvous yellow, a broad vitta down the middle, together with the lateral border, black; basal lobe short, deeply depressed. Scutellum shining black, curved, triangular, its apex obtuse. Elytra much broader than the thorax, slightly increasing in width towards their apex; sides narrowly margined, their outer edge serrate, margin slightly dilated towards the posterior angles, which are produced obliquely outwards and

backwards into a flattened acute tooth; apex obtusely rounded, apical margin slightly dilated, its outer edge serrate; above flattened along the suture; each elytron with four raised costæ, the third obsolete in the middle, suture also elevated, interstices each with a double row of deep, large, regular punctures. Beneath bright fulvous; pleuræ, limb of abdomen, and the legs black; on the under surface of all the thighs, near their base, is a fulvous spot.

Collection of Mr. Bates; also in my own cabinet.

Uroplata pectoralis, n. sp.

U. late oblonga, postice ampliata, subdepressa, obscure flava, subnitida; antennis obscure fulvo-piceis; pectore, tibiæ apice tarsisque nigro-piceis: elytris obsolete fusco maculatis, humeris modice lateraliter productis apice subacutis, apice obtuse rotundatis, fortiter serratis, angulo postico in laminam compressam bispinosam modice lateraliter productis; utroque prope suturam bicostato, interspatiis rude et profunde biserialim punctatis; disco exteriore profunde confuse punctato, interstitiis elevato-reticulatis. Long. 3 lin.

Hab. Brazil.

Head moderately produced between the eyes, vertex smooth, impressed with a deep longitudinal groove; antennæ equal in length to the head and thorax, subincrassate, two basal joints slightly thickened, third slightly elongate, fourth and fifth gradually decreasing in length, the sixth scarcely half the length of the fifth, the seventh nearly equal to the third, somewhat thickened, and, together with the four following joints (which are closely united, but have their sutural lines distinctly visible under a lens), forming a narrow club; apical joints acute. Thorax nearly twice as broad at the base as long, sides narrowly margined, erenulate, nearly straight at the base, narrowed and rounded in front; upper surface transversely impressed on the hinder disk, transversely excavated on the basal lobe, the latter broadly truncate, stained on either side with a piceous spot; middle of disk in front nearly impunctate, finely strigose, sides coarsely and deeply rugose-punctate. Scutellum large, triangular, broad at the base, its apex truncate. Elytra much broader at their base than the thorax; humeral callus thickened, not raised above the surface of the elytra, but produced horizontally, its apex subacute, not extending beyond the lateral border. Apex of tibiæ thickened.

Uroplata Stålei, n. sp.

U. subelongata, subcuneiformis, subdepressa, rufo-fulva; capite supra (plaga verticali excepta) thoracisque margine laterali nigris: elytris apice obtusis, angulo postico vix prominulo, apice rotundato;

obscure metallico-*viridibus*, utroque *tricostato*, maculis duabus inter se *confluentibus*, una basi, altera vix ante medium positis, plagaque magna communi *trigonata*, ante apicem posita, *fulvis*.
Long. $3\frac{1}{2}$ lin.

Hab. Amazons.

Head very moderately produced between the eyes, vertex finely rugose, longitudinally grooved; antennæ shorter than half the body, subincrassate, two basal joints nearly equal, the first thickened, third nearly as long as the two preceding united; fourth and fifth equal, each two-thirds the length of the third; sixth distinctly shorter than the fifth, transverse; seventh rather shorter than the third, slightly thickened, and, together with the four apical joints, forming an indistinct, slightly compressed club; seven lower joints nearly cylindrical, subnitidous, granulose. Thorax more than one-half broader than long, sides nearly straight behind, rounded and narrowed before their middle, sinuate immediately behind the anterior angle, the latter armed with an obtuse tooth; above subcylindrical, flattened and transversely impressed on the hinder disk, closely covered with large round punctures, rugose-punctate on the sides, a small longitudinal space in the middle of the disk, impressed in the centre with a short longitudinal groove, free from punctures; basal lobe depressed, broadly truncate. Scutellum broadly triangular, rounded at the apex, basal surface oblique, apical horizontal, slightly concave. Elytra broader than the thorax, sides subparallel in front, gradually but slightly dilated towards the hinder angles, the angles themselves scarcely produced, obtuse; lateral and apical margins slightly dilated, the former minutely and remotely, the latter coarsely, serrate; each elytron *tricostate*, the interspaces deeply bigemellate-punctate.

Uroplata cruentata, n. sp.

U. elongata, anguste cuneiformis, subdepressa, fulvo-rufa, subnitida, thoracis vittis duabus nigris: elytris apice obtuse rotundatis, angulo postico non prominulo, obtuso; singulatim *tricostatis*, obscure rufo-violaceis, metallico-micantibus, utroque linea angusta suturali, margine laterali, postice abbreviata, fascia transversa subapicali maculisque tribus, harum prima basi, secunda vix ante medium, margini adfixa, tertiaque transversa, apice posita, fulvo-rufis.

Long. 3 lin.

Hab. Brazil.

Head moderately produced between the eyes, vertex obsoletely grooved longitudinally, indistinctly keeled in front; antennæ longer than the head and thorax, robust, subincrassate, two basal joints equal, scarcely thickened, third somewhat elongate,

fourth and fifth each nearly one-half shorter than the third, equal, sixth much shorter than the fifth, transverse, seventh equal in length to the third, somewhat thickened, and forming with the four terminal joints an elongated, scarcely compressed club; sutural lines between the four latter obsolete. Thorax nearly twice as broad as long at the base, sides straight but running slightly outwards from their base to the middle, thence rounded and narrowed to the apex; anterior angles armed with an obtuse tooth; above transversely convex, transversely depressed on the hinder disk, surface closely covered with large deep punctures, rugose, a longitudinal space down the middle nearly free from punctures; basal lobe depressed, very broadly truncate. Scutellum transverse at the base, sides narrowed from base to apex, the latter obtuse, surface oblique at the base, apical portion horizontal, transversely grooved. Elytra slightly increasing in width from base to apex, lateral and apical margins narrowly dilated, finely but not closely serrate; apical border obtuse, its serratures less distinct than those of the sides; each elytron tricostrate, the interspaces deeply bigemellate-punctate; the three patches on each elytron are arranged as follows:—first subrotundate at the base; the second large, subtriangular, on the outer disk, its base attached to the lateral border; and the third transverse, concave, placed before the apex.

In my collection.

Uroplata octopustulata, n. sp.

U. elongata, anguste cuneiformis, subdepressa, rufo-testacea, subnitida; thorace lateribus rotundatis, rude rugoso-punctato: elytris apice truncatis, angulo postico lamina compressa, apice rotundata, lateraliter vix prominula, instructis; utroque tricostrato, pone medium quadricostato; pallide rufo-violaceis, singulatim pustulis quatuor, una basi, secunda ante, tertia pone medium quartaque ante apicem positis, fulvis, angulo postico obscure purpureo.

Long. $3\frac{1}{4}$ lin.

Hab. Brazil.

Very similar in form and colouring to *U. cruentata*, but more coarsely punctured; apex of the elytra more distinctly truncate, their hinder angles more distinctly produced. Head somewhat strongly produced between the eyes, vertex smooth; antennæ robust, subincrassate towards their apex, joints cylindrical, two basal equal, only slightly thickened, third slightly elongate, fourth and fifth equal, each one-third shorter than the third, sixth rather shorter than the fifth, seventh equal in length to the third, slightly thickened, and, with the four following joints (which are coalescent, and without any trace of sutural lines), forming an indistinct club, the apex of which is acute. Thorax

nearly twice as broad as long at the base, flattened on the hinder disk, subcylindrical in front; surface deeply and closely impressed with large punctures, rugose. Scutellum semiovate. Elytra broader at the base than the thorax, gradually but slightly increasing from their base to the hinder angles; shoulders oblique; lateral and apical margins narrowly dilated, coarsely serrate; interspaces between the costæ deeply and coarsely bigemellate-punctate; on the outer disk, just above the commencement of the third vitta, the puncturing is somewhat confused.

In my own cabinet.

Uroplata concava, n. sp.

U. elongata, subparallela, subdepressa, obscure rufo-fusca, subnitida; thoracis vittis duabus nigro-fuscis; pedibus flavo-fulvis: elytris fere parallelis, apice conjunctim concavis, serratis, angulo postico in laminam acutam, trigonam, postice serratam, extrorsum vix dilatatam, retrorsum paullo productis; utroque tricostato, interspatiis profunde bifariam punctatis, interspatio tertio pone medium confuse punctato.

Long. $3\frac{1}{2}$ lin.

Hab. Amazons.

Head strongly produced between the eyes, vertex subopaque, slightly concave behind, furnished with a longitudinal ridge in front; antennæ very robust, incrassate, two basal joints short, almost transverse, thickened, nearly equal, four following joints short, cylindrical, transverse, nearly equal, the sixth being scarcely perceptibly shorter than the fifth; seventh nearly as long as the two preceding united, coalescent with the four terminal joints, which together form an opaque compressed club, dilated at its upper edge, their sutural lines visible under a lens. Thorax about one-half broader than long at the base, sides moderately narrowed and rounded from base to apex, anterior angles armed with an obtuse tooth; above subcylindrical, flattened and transversely depressed on the hinder disk, surface closely covered with coarse deeply impressed punctures, sides rugose; basal lobe oblique, broadly truncate, not transversely grooved. Scutellum transverse, sides diverging from the base towards the apex, the latter obtusely truncate. Elytra broader than the thorax, subparallel, scarcely increasing in width near the hinder angles; sides very narrowly margined, their outer edge finely serrate, suture (more particularly in front) strongly costate. Thighs armed with a short tooth beneath.

Collection of Mr. H. W. Bates and my own.

Uroplata cincta, n. sp.

U. elongata, ad apicem vix ampliata, subdepressa, obscure fulva,

subnitida; pedibus flavo-fulvis, vertice, antennis thoracisque vitis tribus nigris; elytris (basi excepta) obscure æneo limbatis, limbo laterali bisinuato: elytris apice truncatis, subfortiter serratis, angulo postico in laminam compressam, apice acutam, postice serratam, lateraliter modice prominulam productis; utroque tricostato, interspatiis profunde bifariam punctatis, interspatio tertio pone medium confuse trifariam punctato.

Long. $3\frac{1}{2}$ –4 lin.

Hab. Amazons. Collected by Mr. Bates.

Head strongly produced between the eyes, vertex smooth, indistinctly impressed with a longitudinal groove; antennæ very robust, not increasing in thickness towards their apex, the latter acute; basal joint thickened, second to the sixth inclusive short, nearly equal in length, the sixth being scarcely shorter than the fifth, obturbinate, seventh nearly equal in length to the fifth and sixth, and, together with the four apical joints, opaque and not stouter than those preceding; sutural lines between the last four entirely obsolete. Thorax not twice as broad as long, sides straight at the base, rounded and narrowed in the middle, sinuate in front, lateral margin obsoletely denticulate; above subcylindrical, flattened and excavated transversely on the hinder disk; surface impressed with large, round, deep punctures, which are crowded on the sides, more distant on the disk; a broad lateral vitta on either side, and a narrow stripe down the centre, black; basal lobe broadly truncate, its surface oblique, transversely grooved. Scutellum pentagonal, its basal half oblique, the apical surface horizontal. Elytra broader than the thorax, nearly parallel, slightly increasing in width towards the hinder angles, sides narrowly margined, finely toothed, hinder angles produced into a broad triangular process, which, slightly dilated laterally, does not reach backwards beyond the apical margin, its posterior edge armed with three or four large teeth; apical margin of elytra furnished with coarser teeth than those on the sides. All the thighs armed beneath with an acute tooth.

Uroplata Robinsonii, n. sp.

U. elongata, subdepressa, rufo-fulva; pedibus flavis; antennis, thoracis lateribus elytrorumque margine rufo-fuscis: elytris apice truncatis, angulo postico in spinam validam acutam retrorsum productis, utroque tricostato, puncto centrali anguloque postico nigris.

Long. $2\frac{2}{3}$ lin.

Hab. Brazil.

Head strongly produced between the eyes, vertex furnished with a longitudinal ridge in front, obsoletely grooved posteriorly; antennæ robust, subincrassate, scarcely longer than the head and

thorax, two basal joints short, nearly equal, slightly thickened, third scarcely longer than the second, semiovate, its apex truncate; three following joints very short, transverse, nearly equal, the sixth being scarcely shorter than the fifth; these joints (from the first to the sixth) are all covered with coarse longitudinal sulci; seventh nearly equal to the two preceding united, somewhat thickened, and, together with the four terminal joints, forming a distinct, very slightly compressed club, the sutural lines between the last four obsolete. Thorax scarcely broader at the base than long, subconic; sides nearly straight at their extreme base, thence obliquely narrowed to the apex; basal margin deeply sinuate on either side, medial lobe broadly truncate, its surface oblique, transversely sulcate. Scutellum trigonate, its apex obtusely truncate. Elytra broader than the thorax, nearly parallel in front, slightly dilated towards the hinder angles, the latter armed with a strong acute black spine, the apex of which is produced almost directly backwards; lateral and apical margins narrowly dilated, coarsely serrate; each elytron strongly tricostate, the edge of the third costa serrate.

In my own cabinet.

Uroplata miniata, n. sp.

U. anguste cuneiformis, depressa, fulva; antennis, thorace vitta utrinque, elytrorumque fascia subapicali, margine laterali vittulisque obliquis duabus sanguineis: elytris singulatim tricostatis, humeris elevatis, apice obtuse truncatis; angulo postico in spinam acutam purpuream oblique productis,

Long. 3 lin.

Hab. Venezuela.

Head strongly produced between the eyes, vertex slightly raised, impressed in the middle with a longitudinal groove; antennæ nearly half the length of the body, robust, subincrassate; basal joint thickened, second and third each shorter than the first, equal, the second being slightly thickened; fourth and two following joints very short, transverse, equal, the sixth being scarcely sensibly shorter than the fifth, seventh equal in length to the two preceding, and, together with the four apical joints, thickened and forming an elongate slightly compressed club; sutural lines between the last four joints nearly obsolete. Thorax as long as broad at the base, subconic, the sides obliquely converging from immediately above the base to the apex; subcylindrical above, indistinctly flattened on the hinder disk, closely and deeply impressed with large round punctures; basal lobe oblique, its surface transversely sulcate. Scutellum large, depressed at the base, subpentagonal, the apical angle very obtuse. Elytra broader than the thorax, subparallel, slightly dilated to-

wards the hinder angles, the latter armed with a broad, flattened, slightly curved, oblique spine, its upper surface thickened, its apex directed backwards; the narrow lateral border, together with the apical margin, serrate; humeral callus obliquely elevated, its apex acute; each elytron with three strongly raised costæ, the first still more strongly elevated at the base, the second and third both commencing at the apex of the humeral callus, the outer one serrate; interspaces deeply bigemellate-punctate; the two oblique vittæ extend from the lateral margin nearly to the suture, the first running along the hinder edge of the raised humeral callus, the second being placed just below the middle of the disk.

In my own collection.

[To be continued.]

XXXVIII.—*Notes on the Whalebone-Whales; with a Synopsis of the Species.* By Dr. JOHN EDWARD GRAY, F.R.S. &c.

THE rarity of their occurrence, the difficulty of naturalists examining them when they do occur, and especially of comparing them with other specimens, explain why the Whalebone-Whales have been so imperfectly known; and, when observed, the specimens are so large that it is almost impossible for the eye of the naturalist to take them in as a whole, and to compare the parts in detail.

The allied species are so alike externally, that naturalists and others who have had the opportunity of examining them have been inclined to regard the different specimens observed as only states of growth of the same species; and, for the same reason, the specimens which have been observed in different parts of the world have been regarded as alike; and thus the belief has become general that the species of Whalebone-Whales have a very extended geographical distribution.

The examination and comparison of the few skeletons that have been collected have shown that there are many more species than has been generally supposed, and seem to lead to the conclusion that each species of Whalebone-Whale has only a comparatively limited geographical range; and the observation of whales seems to make it probable that some of them make periodical migrations within these limits.

The study of the subject, and especially of the bones that have been collected, has led me to the following conclusions:—

1. That, though the adult Whalebone-Whales have a large head compared with the size of the body, the head of the fœtal